

Drava Highway Bridge (Croatia)



Project description

This bridge carries the Croatian A5 highway (part of European route E73) across the Drava River, a tributary of the Danube, near the town of Osijek in eastern Croatia. It has a total length of 2485 m, including the approaches at each side of the river which raise the highway above the river's flood plains. The main cable stayed structure has a length of 420 m, including a main span of 220 m, with its composite deck supported by two A-shaped pylons of 75 m height. The approach structures are of precast prestressed concrete, with span widths of 35 m.

mageba scope

To control the longitudinal movements of the bridge's long deck under the action of sudden forces, the bridge was equipped with eight RESTON®STU shock transmission units. These are designed to allow free movement during normal service conditions, but to lock up and thus transmit very large forces to the supporting structure, at the preferred location, when high-speed movements occur – for example, as typically might arise during an earthquake or as a result of exceptional traffic braking forces.

The devices supplied were designed for forces of up to 3000 kN and movements of +/- 160 mm.

Highlights & facts

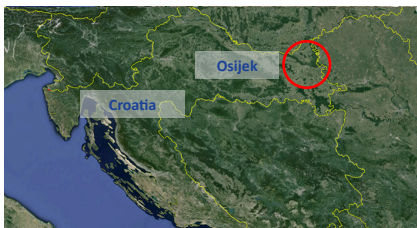
mageba products:

Type: RESTON®STU shock transmission units
Force: 3000 kN
Stroke: +/- 160 mm
Installation: 2014

Structure:

City: Osijek
Country: Croatia
Type: Cable-stayed bridge
Completed: 2015
Length: 2485 m incl. approaches (main structure: 420 m)
Contractor: Viadukt dd

The bridge carries the Croatian A5 motorway across the River Drava in eastern Croatia



A RESTON®STU shock transmission unit, not showing pins or connecting fittings at its ends



Typical performance diagram of a RESTON®STU, relating force, speed and stroke

